APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

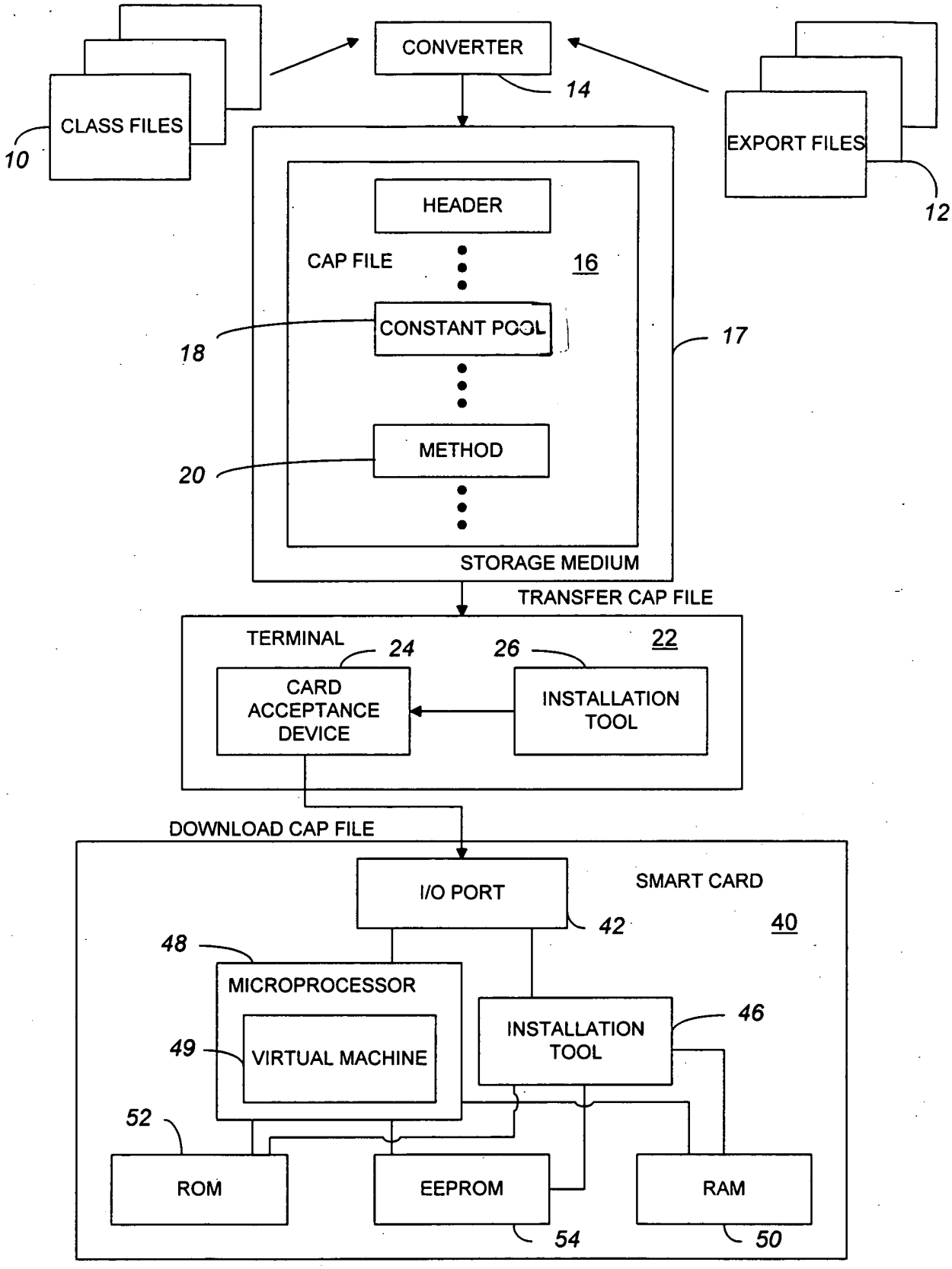

FIG. 1

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

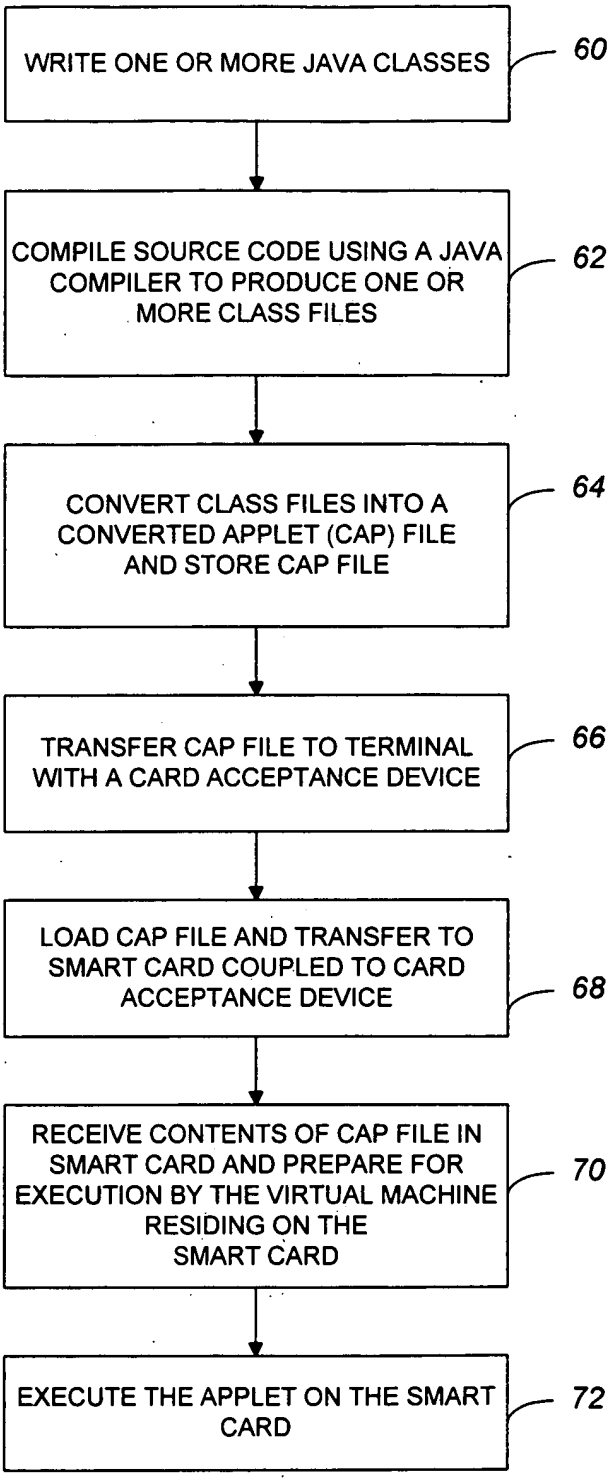

FIG. 2

APPROVED BY DRAFTSMAN
O.G. FIG.
CLASS SUBCLASS

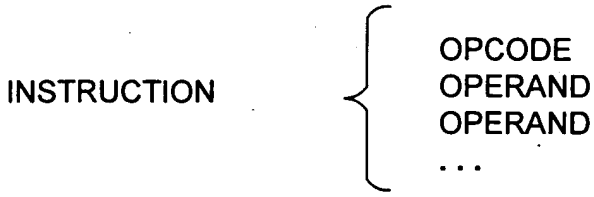

FIG. 3A

Docket = 50P3400

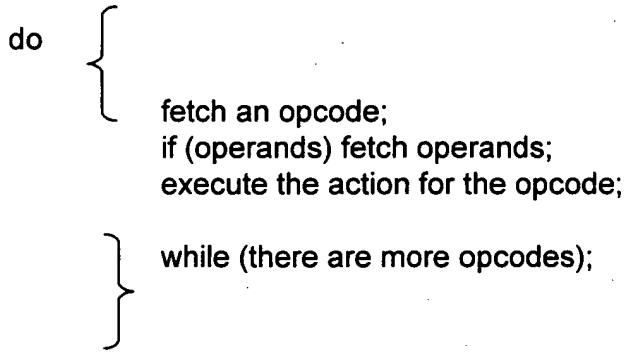

FIG. 3B

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

EXHIBIT 2005

0	nop
1	aconst_null
2	sconst_m1
3	sconst_0
4	sconst_1
5	sconst_2
6	sconst_3
7	sconst_4
8	sconst_5
9	iconst_m1
10	iconst_0
11	iconst_1
12	iconst_2
13	iconst_3
14	iconst_4
15	iconst_5
16	bspush
17	sspush
18	bipush
19	sipush
20	iipush
21	aload
22	sload
23	iload
24	aload_0
25	aload_1
26	aload_2
27	aload_3
28	sload_0
29	sload_1
30	sload_2
31	sload_3
32	iload_0
33	iload_1
34	iload_2
35	iload_3
36	aaload
37	baload
38	saload
39	iaload
40	astore
41	sstore
42	istore
43	astore_0
44	astore_1
45	astore_2
46	astore_3
47	sstore_0
48	sstore_1
49	sstore_2
50	sstore_3
51	istore_0
52	istore_1
53	istore_2
54	istore_3
55	aastore
56	bastore
57	sastore
58	iastore
59	pop
60	pop2
61	dup
62	dup2
63	dup_x
64	swap_x
65	sadd
66	iadd
67	ssub
68	isub
69	smul
70	imul
71	sdiv
72	idiv
73	srem
74	irem
75	sneg
76	ineg
77	sshl
78	ishl
79	sshr
80	ishr
81	sushr
82	iushr
83	sand
84	iand
85	sor
86	ior
87	sxor
88	ixor
89	sinc
90	iinc
91	s2b
92	s2i
93	i2b
94	i2s
95	icmp
96	ifeq
97	ifne
98	iflt
99	ifge
100	ifgt
101	ifle
102	ifnull
103	ifnonnull
104	if_acmpeq
105	if_acmpne
106	if_scmpeq
107	if_scmpne
108	if_scmplt
109	if_scmpge
110	if_scmpgt
111	if_scmple
112	goto
113	jsr
114	ret
115	stableswitch
116	itableswitch
117	slookupswitch
118	ilookupswitch
119	areturn
120	sreturn
121	ireturn
122	return
123	getstatic_a
124	getstatic_b
125	getstatic_s
126	getstatic_i
127	putstatic_a
128	putstatic_b
129	putstatic_s
130	putstatic_i
131	getfield_a
132	getfield_b
133	getfield_s
134	getfield_i
135	putfield_a
136	putfield_b
137	putfield_s
138	putfield_i
139	invokevirtual
140	invokespecial
141	invokestatic
142	invokeinterface
143	new
144	newarray
145	anewarray
146	arraylength
147	athrow
148	checkcast
149	instanceof
150	sinc_w
151	iinc_w
152	ifeq_w
153	ifne_w
154	iflt_w
155	ifge_w
156	ifgt_w
157	ifle_w
158	ifnull_w
159	ifnonnull_w
160	if_acmpeq_w
161	if_acmpne_w
162	if_scmpeq_w
163	if_scmpne_w
164	if_scmplt_w
165	if_scmpge_w
166	if_scmpgt_w
167	if_scmple_w
168	goto_w
169	getfield_a_w
170	getfield_b_w
171	getfield_s_w
172	getfield_i_w
173	getfield_a_this
174	getfield_b_this
175	getfield_s_this
176	getfield_i_this
177	putfield_a_w
178	putfield_b_w
179	putfield_s_w
180	putfield_i_w
181	putfield_a_this
182	putfield_b_this
183	putfield_s_this
184	putfield_i_this
	...
254	impdep1
255	impdep2

FIG. 4A

APPROVED BY DRAFTSMAN | C.G. FIG. | CLASS | SUBCLASS

aaload	36	iand	84	iload_0	32	putstatic_s	129
aastore	55	iastore	58	iload_1	33	ret	114
aconst_null	1	icmp	95	iload_2	34	return	122
aload	21	iconst_0	10	iload_3	35	s2b	91
aload_0	24	iconst_1	11	ilookupswitch	118	s2i	92
aload_1	25	iconst_2	12	imul	70	sadd	65
aload_2	26	iconst_3	13	ineg	76	saload	38
aload_3	27	iconst_4	14	instanceof	149	sand	83
anewarray	145	iconst_5	15	invokeinterface	142	sastore	57
areturn	119	iconst_m1	9	invokespecial	140	sconst_0	3
arraylength	146	idiv	72	invokestatic	141	sconst_1	4
astore	40	if_acmpeq	104	invokevirtual	139	sconst_2	5
astore_0	43	if_acmpeq_w	160	ior	86	sconst_3	6
astore_1	44	if_acmpne	105	irem	74	sconst_4	7
astore_2	45	if_acmpne_w	161	ireturn	121	sconst_5	8
astore_3	46	if_scmpeq	106	ishl	78	sconst_m1	2
athrow	147	if_scmpeq_w	162	ishr	80	sdiv	71
baload	37	if_scmpge	109	istore	42	sinc	89
bastore	56	if_scmpge_w	165	istore_0	51	sinc_w	150
bipush	18	if_scmpgt	110	istore_1	52	sipush	19
bspush	16	if_scmpgt_w	166	istore_2	53	sload	22
checkcast	148	if_scmple	111	istore_3	54	sload_0	28
dup	61	if_scmple_w	167	isub	68	sload_1	29
dup_x	63	if_scmplt	108	itableswitch	116	sload_2	30
dup2	62	if_scmplt_w	164	iushr	82	sload_3	31
getfield_a	131	if_scmpne	107	ixor	88	slookupswitch	117
getfield_a_this	173	if_scmpne_w	163	jsr	113	smul	69
getfield_a_w	169	ifeq	96	new	143	sneg	75
getfield_b	132	ifeq_w	152	newarray	144	sor	85
getfield_b_this	174	ifge	99	nop	0	srem	73
getfield_b_w	170	ifge_w	155	pop	59	sreturn	120
getfield_i	134	ifgt	100	pop2	60	sshl	77
getfield_i_this	176	ifgt_w	156	putfield_a	135	sshr	79
getfield_i_w	172	ifle	101	putfield_a_this	181	sspush	17
getfield_s	133	ifle_w	157	putfield_a_w	177	sstore	41
getfield_s_this	175	iflt	98	putfield_b	136	sstore_0	47
getfield_s_w	171	iflt_w	154	putfield_b_this	182	sstore_1	48
getstatic_a	123	ifne	97	putfield_b_w	178	sstore_2	49
getstatic_b	124	ifne_w	153	putfield_i	138	sstore_3	50
getstatic_i	126	ifnonnull	103	putfield_i_this	184	ssub	67
getstatic_s	125	ifnonnull_w	159	putfield_i_w	180	stableswitch	115
goto	112	ifnull	102	putfield_s	137	sushr	81
goto_w	168	ifnull_w	158	putfield_s_this	183	swap_x	64
i2b	93	iinc	90	putfield_s_w	179	sxor	87
i2s	94	iinc_w	151	putstatic_a	127		
iadd	66	iipush	20	putstatic_b	128		
iaload	39	iload	23	putstatic_i	130		

Exhibit 2 Sun v. Google

FIG. 4B

APPROVED O.G. FIG.
BY EXAMINER CLASS SUBCLASS

opcode	byte	short	int	reference
Tspush	bspush	sspush		
Tipush	bipush	sipush	iipush	
Tconst		sconst	iconst	aconst
Tload		sload	iload	aload
Tstore		sstore	istore	astore
Tinc		sinc	iinc	
Taload	baload	saload	iaload	aaload
Tadd		sadd	iadd	
Tsub		ssub	isub	
Tmul		smul	imul	
Tdiv		sdiv	idiv	
Trem		srem	irem	
Tneg		sneg	ineg	
Tshl		sshl	ishl	
Tshr		sshr	ishr	
Tushr		sushr	iushr	
Tand		sand	iand	
Tor		sor	ior	
Txor		sxor	ixor	
s2T	s2b		s2i	
i2T	i2b	i2s		
Tcmp			icmp	
if_TcmpOP		if_scmpOP		if_acmpOP
Tlookupswitch		slookupswitch	ilookupswitch	
Ttableswitch		stableswitch	itableswitch	
Treturn		sreturn	ireturn	areturn
getstatic_T	getstatic_b	getstatic_s	getstatic_i	getstatic_a
putstatic_T	putstatic_b	putstatic_s	putstatic_i	putstatic_a
getfield_T	getfield_b	getfield_s	getfield_i	getfield_a
putfield_T	putfield_b	putfield_s	putfield_i	putfield_a

FIG. 5

APPROVED BY DRAFTSMAN
C.L.G. FIG.
CLASS SUBCLASS

iipush (Java Card™ Virtual Machine)

Operation: Push integer onto stack

Format:

iipush
byte1
byte2
byte3
byte4

Form: iipush = 20 (0x14)

FIG. 6A

ldc (Java™ Virtual Machine)

Operation: Push item onto stack

Format:

ldc
index

Form: ldc = 18 (0x12)

FIG. 6B

ART UNIT CLASS SUBCLASS

checkcast (Java™ Virtual Machine)

Operation Check whether object is of a given type

Format

checkcast
indexbyte1
indexbyte2

Form checkcast = 192 (0xC0)

FIG. 7A

checkcast (Java Card™ Virtual Machine)

Operation check whether object is of a given type

Format

checkcast
atype
indexbyte1
indexbyte2

Form checkcast = 148 (0x94)

FIG. 7B

CLASS SUBCLASS
BY
DRAFTSMAN

getfield _ T (Java Card™ Virtual Machine)

Operation Fetch field from object

Format

getfield _ T
index

Forms

getfield _ a = 131 (0x83)
getfield _ b = 132 (0x84)
getfield _ s = 133 (0x85)
getfield _ i = 134 (0x86)

FIG. 8A

getfield (Java™ Virtual Machine)

Operation Fetch field from object

Format

getfield
indexbyte1
indexbyte2

Form getfield = 180 (0xb4)

FIG. 8B

APPROVED O.G. FIG
BY CLASS SUBCLASS
DRAFTSMAN

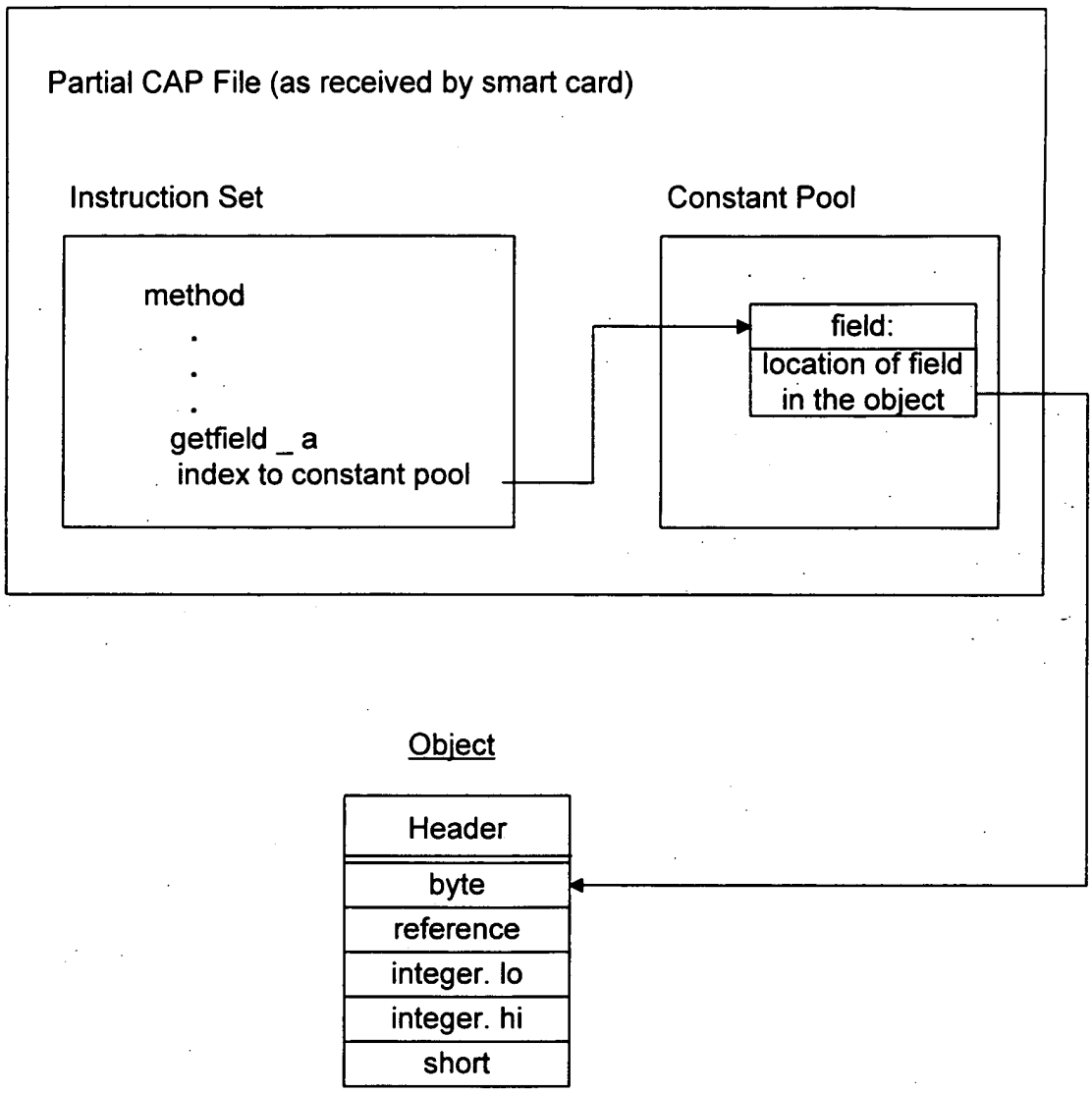

FIG. 9A

PRIOR ART
CLASS
SUBCLASS
DRAFTSMAN

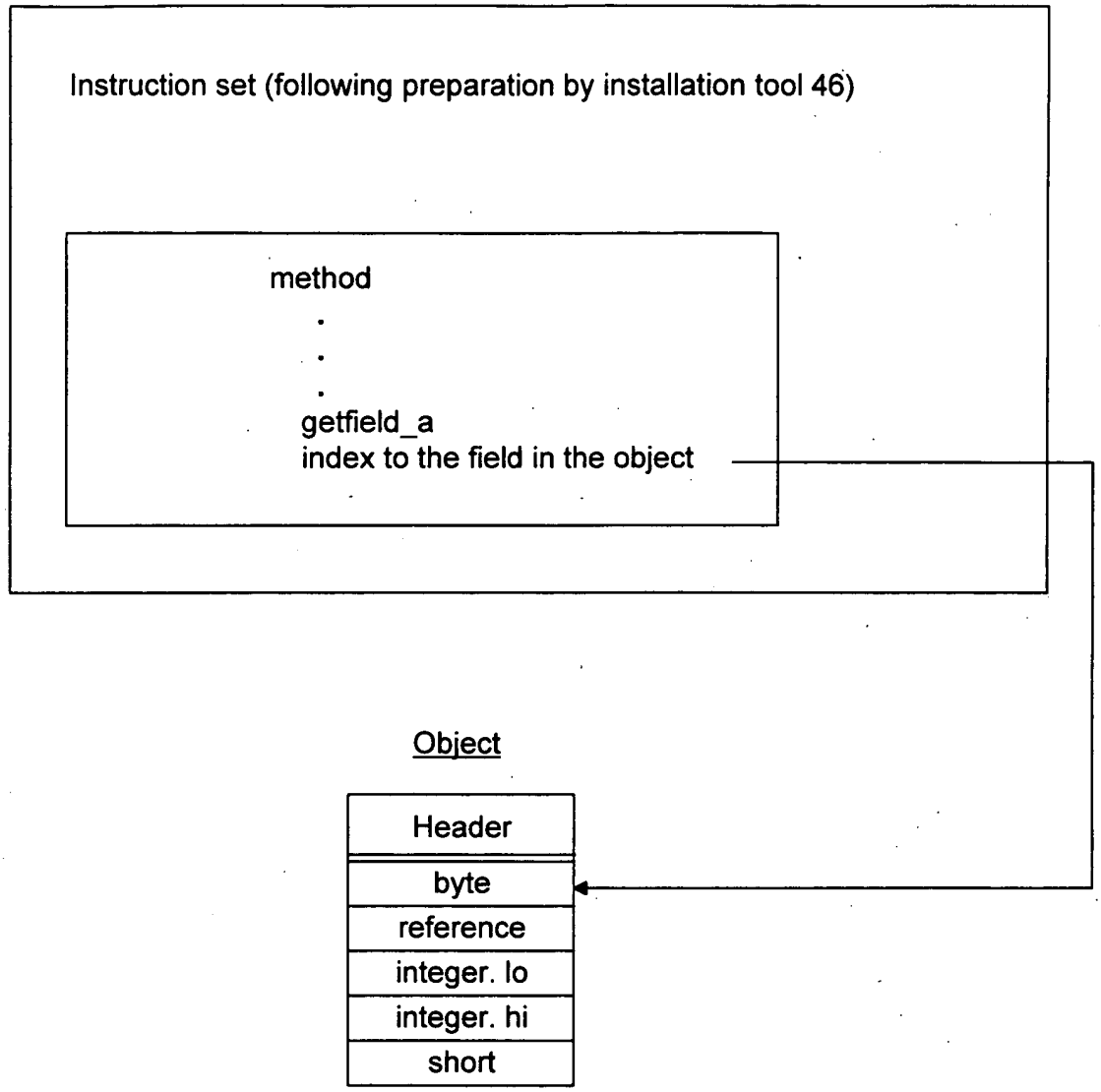

FIG. 9B

APPROVED O.G. 5-G
CLASS SUBCLASS
BY

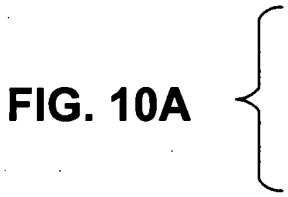

FIG. 10A

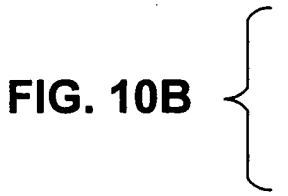

FIG. 10B

Docket No. 50277-0805

APPROVED FIG.
BY CLASS SUBCLASS
DRAWING

```
iload
<a>
iload
<b>
iadd
i2s
istore
```

FIG. 11A

```
sload
<a>
sload
<b>
sadd
sstore
```

FIG. 11B

Docket #: 2003P03530

APPROVED O.G. FIG
BY CLASS SUBCLASS
DRAFTSMAN

smart cards

cellular telephones

boundary scan devices

field programmable devices

PDAs

pagers

other small or miniature devices

...

FIG. 12

SONY-ECD0003